

REMARKS

Applicant has carefully considered the Office Action of January 30, 2003. The present response is intended to be fully responsive to all points of objection raised by the Examiner and is believed to place the application in condition for allowance. Favorable reconsideration and allowance of the application are respectfully requested.

A petition for an extension of response time is attached.

The drawings have been amended and a separate drawing amendment is attached herewith.

Claims 1 and 17 have been amended. Claim 16 has been deleted and replaced by new claim 20. Therefore, claims 1-15 and 17-20 remain in the case.

It is the object of the present invention to produce puncturable beverage dispensing pouches having a specific area of weakness designed for ease of puncture. An advantage of the present invention is in the use of a molten sealant layer for the purpose of sealing the container and simultaneously occluding a hole formed previously in the manufacturing process.

Claim 17 has been amended and new claim 20 has been added to replace claim 16, to remove Sec. 112 rejections by adding descriptive language regarding the method of hole formation and covering of the holes, and to clarify terms where necessary.

As stated in the specification at page 2, lines 13-15, and at page 4, lines 10-12, in the prior art, the web material is punched with a hole, and then a closure sheeting web is patch welded around the hole significantly increasing the thickness of the final product.

By contrast, the present invention describes a method of making the web material, such that the

thickness of the web material after a hole has been punched and sealed, as part of the manufacturing process, is just the same as that of the finished flexible web material, produced according to the prior art methods.

Therefore, the present invention provides an advantage since, as stated in the specification at page 4, line 8, "... there is no waste of material since the final thickness of the web material is the same as when using unpunched web material."

New claim 20 is supported by the specification at page 5, lines 1-4, as follows:

"Another exemplary embodiment of this invention, which allows for a continuous production of beverage containers is by covering the punched holes by extrusion lamination of two layers of polyethylene, one is a molten adherence layer and the other a solid outer layer."

As amended, claim 17 describes a container construction, having a hole which has been sealed, by use of a molten sealant layer for the purpose of sealing the container and simultaneously occluding a hole formed previously in the manufacturing process. Thus, the final web material thickness has the same thickness as a container made using the method of the prior art, before a hole has been formed.

Further support for this amendment is found at page 5, lines 9-11 of the present application, where it is stated: "The width of the entire sealant layer ends up having a thickness similar to that of the finished flexible web material known in the prior art."

In light of the above, the section 112 rejections to claims 16 (now 20) and 17 are deemed overcome.

The Examiner has rejected claims 5-7, 9-13, 15, 18 and 19 under Sec. 102(b) as being anticipated by Yoshida.

The Examiner's attention is directed to Yoshida at col. 2, lines 16-19, where his method for providing a cut in a beverage packaging bag is defined in detail:

The packaging bag "is provided with a number of cuts in a portion of the reinforcing outer layer by means of a laser which is directed at the bag through a mask having the desired pattern."

The Yoshida laser method differs substantially from the laser method described in the present application. Yoshida teaches providing the panel segment with a pattern of score lines in a portion of the reinforcing outer layer by means of a single application of a laser which is directed at the bag through a mask.

By contrast, per the method of the present invention the web, intended to be the front side of the bag, passes under a movable laser source, enabling multiple beam paths. The laser beam may be applied directly, without the use of a mask, using as much as 3 to 4 times the energy used in normal scoring treatment, per the specification at page 10, lines 21-23.

The present invention's laser method is inherently more efficient and flexible. As stated at page 11, lines 6-10, and as recited in claim 5, the inventive process weakens the material by doubly scoring the area of the structural layer where the beam paths intersect. The heat transmitted through the structural and air/moisture layers to the sealant layer is believed to be sufficient to cause thermally driven changes in the sealant, making it easier to puncture the pouch at the puncture point.

Since there is no disclosure by Yoshida of a movable laser source which enables a process of weakening the material by double scoring the area of the structural layer where the beam paths intersect, it cannot be fairly said that Yoshida anticipates the claims under Sec. 102(b).

The features of the present invention, recited in the dependent claims 6-11 are deemed to be patentable as being based on independent claim 5 which is deemed patentable.

Independent claim 12 recites "laser score paths" which is not disclosed by Yoshida and therefore it, and the dependent claims 13 and 15, are also not anticipated.

Independent claim 18 recites a construction wherein the holes are occluded, and this is not disclosed by Yoshida and therefore claim 18, and the dependent claim 19, are also not anticipated.

As stated in the decision in In Re Marshall, 198 USPQ 344 (1978), "To constitute an anticipation, all material elements recited in a claim must be found in one unit of prior art...". Since the Yoshida reference neither 1) identically describes the invention, nor 2) enables one skilled in the art to practice it, Applicant deems the 102(b) rejection improper, and respectfully requests that it be withdrawn.

The Examiner has rejected claims 1-4 under Sec. 103(a) as being unpatentable over Wild (5,868,658) in view of Heller (3,459,625).

The Wild method and apparatus for making beverage containers differs substantially from the method described in the present application. The Wild method teaches that a piercing hole is formed in a front side sheeting web and a closure sheeting web is welded around the piercing hole as described in col. 1, lines 38-44.

The piercing hole is punched completely through the front sheeting web as described in column 3, lines 38-40. This may be clearly seen in Fig. 5, showing a closure sheeting web patch welded around the hole, significantly increasing the thickness of the final product.

In contrast, in the present invention, an additional patch is not required since the punched holes are covered

by extrusion lamination that occludes the entire surface of the front side web, per the specification at p. 5, lines 1-6.

Claim 1 has been amended so as to accentuate the substantial difference between the method of the present invention and that of the prior art. As amended, claim 1 recites a web material comprising a structural layer, a barrier layer and a sealant layer. The sealant layer is provided at half of the normal final thickness, then punched, and the entire sealant layer is then supplemented with a molten sealant which is applied by extrusion coating.

In addition, the sealant layer of the flexible web material, is applied in a coating along the entire outer surface of the sealant layer.

Support for these amendments is provided at p. 3, lines 20-23 and also at p. 9, lines 19-24.

Heller's manufacturing method is designed to guarantee a leakproof container. Increasing the thickness of the extrusion coating does not hinder this goal, as stated at col. 7, lines 16-24.

In contrast, the purpose of the present invention is to produce puncturable beverage dispensing pouches having a specific area of weakness designed for ease of puncture.

It is the Applicant's position that the combination of the Wild and Heller references to form the basis of the 103(a) rejection is improper, and Applicant respectfully requests that it be withdrawn.

Therefore, claim 1 is deemed to be patentable, and the features recited in the dependent claims 2-4 are deemed to be patentable as being based thereon.

The Examiner has rejected claims 8,14,16 and 17 under Sec. 103(a) as being unpatentable over Yoshida.

Regarding claim 8, Yoshida does not teach a beam containing 3-4 times the energy used in normal scoring treatment, because the mask blocks a substantial part of the energy.

Regarding claim 14, Yoshida does not teach having the width of the laser score paths 3-4 times wider than normal, because when using a mask as in Yoshida, precise focusing is crucial, and the present invention does not use a mask and therefore the reference is irrelevant.

Regarding claim 16, Yoshida does not teach a method for covering holes.

Regarding claim 17, Yoshida does not disclose a method in which the sealant layer is provided at half its final thickness.

In citing the references under Sec. 103(a), the question is raised whether the references would suggest the invention, as stated in the decision of *In Re Lintner* (172 USPQ 560, 562, CCPA 1972);

"In determining the propriety of the Patent Office case for obviousness in the first instance, it is necessary to ascertain whether or not the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the references before him to make the proposed substitution, combination or other modification."

Similarly, *In Re Regel* (188 USPQ 136, CCPA 1975) decided that the question raised under Sec. 103 is whether the prior art taken as a whole would suggest the claimed invention to one of ordinary skill in the art. Accordingly, even if all the elements of a claim are disclosed in various prior art references, the claimed invention taken as a whole cannot be said to be obvious without some reason given in the prior art why one of ordinary skill would have been prompted to combine the teachings of the references to arrive at the claimed invention.

Simply put, and as stated in In Re Clinton (188 USPQ 365 CCPA 1976), "do the references themselves... suggest doing what appellants have done", such that there is a requirement that the prior art must have made any proposed modification or changes in the prior art obvious to do, rather than obvious to try.

It is respectfully put forward by the Applicant that there is no reason to consider the prior art references, Wild and Heller, either individually or in combination, as rendering the invention obvious, since Wild teaches a classical prior-art method, in which the closure sheeting web is patch welded around the hole, significantly increasing the thickness of the final product.

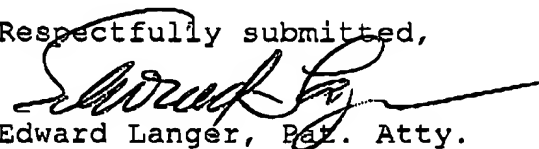
In contrast, the present invention teaches a method in which the punched holes are covered by extrusion lamination that occludes the entire surface of the front side web.

Heller teaches increasing the thickness of the extrusion coating to provide a leakproof container.

In contrast, the present invention teaches puncturable beverage dispensing pouches having a specific area of weakness designed for ease of puncture, without increasing the thickness of the web material.

In view of the foregoing remarks, all of the claims in the application are deemed to be allowable. Further reconsideration and allowance of the application is respectfully requested at an early date.

Respectfully submitted,


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MARKED UP VERSION OF THE AMENDMENTS

In the claims:

Claim 1 has been amended, as follows:

1. (Once amended) A method of making a beverage container constructed from at least two panels of flexible laminate web material, at least a first panel thereof having a structural layer, a barrier layer and an outer sealant layer,

in which said sealant layer having a first thickness is provided at half its final thickness,

said method comprising the steps of punching a hole through all the said layers of said first panel,

extruding molten sealant onto said sealant layer supplementing said sealant layer with molten sealant applied by extrusion coating, along the entire outer surface of said sealant layer, thereby occluding said hole, said molten sealant supplement functioning as the equivalent of a closure sheeting patch,

cooling said first panel and joining said panels to thereby form a drinking pouch.

Claim 16 has been deleted without prejudice.

Claim 17 has been amended, as follows:

17. (Once amended) A method of making a beverage container as described in claim ~~16~~ 20, in which the ~~final thickness of the web material punched holes~~ are covered by said sealant layer, the width of said entire sealant layer, comprised of said molten adherence layer and said solid outer layer, is just the same as the thickness of a web without a hole,

produced according to known methods ends up having a thickness similar to that of the finished flexible web material known in the prior art.

New claim 20 has been added, as follows:

20. (New) A method of making a beverage container comprising covering punched holes by forming a sealant layer using extrusion lamination, said sealant layer comprised of two layers, a molten adherence layer and a solid outer layer,
said adherence layer spread uniformly on to the sheet, thereby occluding the entire surface of the front side web, including said holes,
said outer layer placed unto said adherence layer during the production process, using said adherence layer as an adhesive in order to stick the web together.